## AMENDMENTS TO THE SPECIFICATION:

Please insert the following centered subheading on page 1, after the title.

## FIELD OF TECHNOLOGY

Please replace the subheading on page 1, line 11, with the following centered subheading.

### **BACKGROUND**

Please insert the following centered subheading on page 5, line 6.

#### <u>SUMMARY</u>

Please delete the subheading on page 5, line 17.

Please replace the paragraph beginning on page 5, line 18, with the following paragraph.

As specified by the invention, in a manufacturing process according to the preamble of claim 1, staple fibers of a specific length are first fibrillated, then formed into a continuous web by means of a paper machine, preferably in an inclined wetlaid wire machine, and the web or sections thereof are subjected to a calendaring process und subsequently to a temperature treatment to obtain its electrical conductivity by carbonizing/graphitizing. The process according to the invention permits a gas- permeable material to be manufactured cost-effectively that can be employed as a gas diffusion layer in polymer electrolyte fuel cells. Surprisingly, it has

been successfully shown that it is possible to manufacture a micro porous material made of synthetic fibers using the wet-laid paper-making manufacturing process of forming a fibrous web or felt, and to make this fibrous material electrically conducting, i. e. ion-permeable, by subsequently converting the synthetics to carbon/ graphite.

This is in contrast to the prior art, according to which carbon fibers are employed who are already electrically conductive and to process these into a flat material or layer.

Please replace the paragraph beginning on page 9, line 17, with the following paragraph.

The object of this invention is also the provision of a fibrous, flat (two-dimensional) and porous material obtained via a <u>manufacturing</u> process <u>described</u> <u>below.</u> <u>according to one of claims 1 through 19.</u>

Please replace the paragraph beginning on page 10, line 1, with the following paragraph.

A further object of this invention is a fuel cell with at least two gas diffusion layers that are separated by means of an electrically non-conducting, but proton permeable separating wall or membrane, and that can be layered with at least one catalyst such as platinum, said fuel cell being characterized in that the gas diffusion layers are made at least in part of a material described below according to one of claims 20 to 22 and non-woven fabric. fabric according to one of claims 23 to 29.

The object of this invention is also the use of a manufactured material obtained

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according to one of claims 1 through 19 as a microporous support for a membrane, in particular for a proton exchange membrane (PEM).

Please insert the following centered subheading on page 10, line 15.

# **BRIEF DESCRIPTION OF DRAWINGS**

Please insert the following centered subheading on page 11, line 4.

# **DETAILED DESCRIPTION**